

WHAT IS CLAIMED IS:

1. A method of monitoring dynamic particle pollution in an etching chamber,
comprising the steps of:

providing a bare wafer coated with a photoresist;

5 positioning the bare wafer in an etching machine and performing an etching
process on the photoresist; and

counting the amount of the particles on the etched wafer so as to determine
polluted situation for the etching machine.

2. The method of claim 1, wherein the etching is carrier out for 9 seconds to 15
seconds.

3. The method of claim 1, wherein the etching machine is a silicon nitride etching
machine.

4. The method of claim 1, wherein the etching machine is a silicon oxide etching
machine.

5 5. The method of claim 1, wherein the etching machine is a silicon oxynitride
etching machine.

6. The method of claim 1, wherein the etching machine is a polysilicon etching
machine.

7. The method of claim 1, wherein the etching machine is a metal etching
20 machine.

8. The method of claim 1, wherein the step of performing the etching process
comprises:

transporting the bare wafer to a main etching chamber; and

turning on a plasma power source to perform the etching process on the photoresist.

9. The method of claim 1, wherein before the step of transporting the wafer to the main etch chamber further includes:

- 5 transporting the bare wafer from a port to a vacuum chamber; and
- transporting the bare wafer from the vacuum chamber to a pre-alignment chamber.